Electronic Version
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Claims

[c1] 1.A system for treatment of a conveyor belt comprising: a sump basin containing a solution at a level to submerse a portion of a conveyor belt, at least one conveyor belt guide and at least one wash spray bar submersed below the solution.

[c2] 2.The system of claim 1 further including a circulation pump.

[c3] 3.The system of claim 2 wherein there is at least one rinse spray bar.

[c4] 4.The system of claim 3 wherein the sump basin includes a cascade drain.

[c5] 5.The system of claim 3 wherein the sump basin includes a skimmer drain at the solution level to allow the purging of any floating debris.

[c6] 6.The system of claim 3 wherein the sump basin includes a drain in proximity to the bottom of the sump basin.

[c7] 7.The system of claim 3 wherein a shedding pan is connected to the sump basin.

[c8] 8.The system of claim 7 wherein the shedding pan collects and returns all excess solution from the conveyor belt into sump basin.

[c9] 9.The system of claim 1 wherein the solution is a lubricant, a washing solution or a sanitizing solution.

[c10] 10.The system of claim 1 wherein there at least two wash spray bars one submersed below the solution which sprays the topside of the conveyor belt and a wash spray bar above the solution which sprays the underside of the conveyer as it passes through the solution.

[c11] 11.The system of claim 3 wherein at least one rinse spray bar is rinsing the conveyor belt after it leaves the solution.

[c12] 12.The system of claim 3 wherein there are two rinse spray bars, one spray bar rinsing the topside of the conveyor belt prior to it entering the solution and one spray bar rinsing the top side of the conveyor belt after it leaves the solution.

[c13] 13.The system of claim 3 wherein there are two rinse spray bars, one rinsing the topside of the conveyor belt and the other rinsing the underside of the conveyor belt prior to the conveyor belt entering the solution and two rinse spray bars one rinsing the topside of the conveyor

belt and the other rinsing the underside of the conveyor belt after the conveyor belt leaves the solution.

[c14] 14.The system of claim 3 wherein the solution in the in the sump basin and the solution emitted from the rinse and wash spray bars is a sanitizing solution.

[c15] 15.The system of claim 3 wherein the solution in the sump basin and the solution emitted from the wash spray bar is the same solution.

[c16] 16.The system of claim 15 wherein the solution emitted from the rinse spray bar is not the same as the solution in the sump basin.

[c17] 17.The system o f claim 16 where in the solution emitted from the wash bar draws the solution from the sump basin.

[c18] 18.The system of claim 3 where in the wash and rinse spray bars are of a size so that enough solution is emitted to saturate the width of the conveyer.

[c19] 19.The system of claim 11 where in the rinse spray bar is emitting a lubricant onto the conveyor belt.

[c20] 20.The system of claim 17 where in the solution in the sump basin and emitted from the wash spray bars is a washing solution and the solution emitted from the rinse

spray bars is a sanitizing solution.

[c21] 21.The system claim 3 comprising a monitoring system to track the systems use.

[c22] 22.The system of claim 21 wherein the monitoring system starts and stops the system at required intervals allowing for the use only when needed.

[c23] 23.The system of claim 21 wherein the monitoring system controls solution levels in the sump basin and the spray amount from the wash and rinse spray bars.

[c24] 24.A method of cleaning a conveyor belt wherein once the conveyor belt is free of any product it is diverted into a treatment system comprised of a sump basin containing a solution and at least one wash spray bar which is submersed in the solution and sprays the conveyor belt as it passes through the sump basin.

[c25] 25.The method of claim 24 wherein there is at least one wash spray bar submersed in the solution and sprays the topside of the conveyor belt as it passes through the sump basin solution and at least one wash spray bar above the solution and sprays the underside of the conveyor belt as it passes through the sump basin solution.

[c26] 26.The method of claim 24 wherein after the conveyor

belt leaves the sump basin solution there is at least one rinse spray bar that emits a solution to the conveyor belt.

[c27] 27.The method of claim 26 wherein there is at least one rinse spray bar positioned to emit a solution to the top side of the conveyor belt and at least one rinse spray bar positioned to emit a solution on the underside of the conveyor belt as the conveyor belt exits the sump basin solution.

[c28] 28.The method of claim 24 wherein before the conveyor belt enters the sump basin solution there is at least one rinse spray bar that emits a solution to the conveyor belt.

[c29] 29.The method of claim 26 wherein there is at least one rinse spray bar positioned to emit a solution to the top side of the conveyor belt and at least one rinse spray bar positioned to emit a solution on the underside of the conveyor belt as the conveyor belt enters the sump basin solution.